

Source Water Assessment Report



Public Water Supply: KANSAS ARMY AMMUNITION PLANT

**Assessment Areas Include:
987**



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Reports were generated with the Automated Source Water Assessment Tool (ASWAT). Assessments were completed online using ASWAT by hundreds of state employees, public water supply staff, and technical assistant providers throughout the State of Kansas.

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Report Description

Detailed Explanation of Entire Report:

The 1996 amendments to the Safe Drinking Water Act require each state to develop a Source Water Assessment Program (SWAP) and a Source Water Assessment (SWA) for each Public Water Supply (PWS) that treats and distributes raw source water. In Kansas there are 761 public water supplies that require SWAs. A SWA includes a delineation of the source water assessment area, an inventory of potential contaminant sources, and a susceptibility analysis.

A PWS can consist of one or more individual assessment areas that require different assessments. In general, an assessment area is delineated at a two-mile fixed radius for a groundwater well. A surface water intake assessment area is the upstream-drainage area (watershed), inside the state border. Additionally, an assessment area can consist of an individual well, group of wells, an individual surface water intake, or multiple surface water intakes.

After each assessment is completed a report is automatically generated using an Internet-based application called the Automated Source Water Assessment Tool (ASWAT). The individual assessment reports combine to form the entire SWA report for a PWS.

A map of each Assessment Area was also generated with ASWAT. However, for security reasons the maps are not included in this report. To obtain a copy of the map(s), please contact your local PWS.

All PWS reports will be available for viewing and downloading on KDHE's Watershed Management Section website(<http://www.kdhe.state.ks.us/nps>) in 2004.

KANSAS ARMY AMMUNITION PLANT Summary:

AA	Type	Diversion Id
987	Surface water single intake	999

Public Water Supply: **KANSAS ARMY AMMUNITION PLANT**
Assessment Area: **987**
Diversion Id's: **999**
Status: **Accepted**
Submit Date: **2003-04-16 10:03:35**

Executive Summary:

The Executive Summary gives the assessment area's Susceptibility Likelihood Score (SLS) for each contaminant of concern category.

SLS indicates which contaminant category is most likely to impact a given public water supply. Contaminants of concern for groundwater include microbiological, inorganic compounds, nitrates, synthetic organic compounds, pesticides, and volatile organic compounds. Contaminants of concern for surface water include microbiological, inorganic compounds, eutrophication – phosphorus, sedimentation, synthetic organic compounds, pesticides, and volatile organic compounds.

To determine the assessment area's susceptibility to contamination, a qualitative (semi-quantitative) screening level susceptibility analysis was designed that utilizes general assumptions and best professional judgement. It is a systematic procedure comprised of simple yes/no questions. Each question in the susceptibility analysis focuses on the presence or absence of potential pollution sources in the assessment area. SLS is most useful in helping the Public Water Supply (PWS) focus on water quality protection actions towards a contaminant category of concern. For example, if the SLS for microbiological contamination is high, relative to volatile organic compounds (VOC), water supply protection planners would conclude that the attention should be directed towards microbiological contaminant sources rather than VOC sources.

Executive Summary

Public Water Supply: **KANSAS ARMY AMMUNITION PLANT**
Assessment Area: **987**

Susceptibility Likelihood Scores for Assessment Area

	A	B	B1	B2	C	C*	D
Susceptibility Likelihood Score – SLS	43	35	51	53	36	51	39
SLS Range	Low	Low	Low	Mid	Low	Low	Low

A – Microbiological

B2 – Sedimentation

C* – Pesticides

B – Inorganic Compounds

C – Synthetic Organic Compounds

D – Volatile Organic Compounds

B1 – Eutrophication – Phosphorous

Susceptibility Likelihood Range

SLS Range	
0–50	Low Susceptibility
51–80	Moderate Susceptibility
81–100	High Susceptibility

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Potential Sources:

The Potential Sources section lists all the sites that have been identified as potential sources of contamination.

Potential sources of contamination may include land uses, industry, or businesses that could generate or store chemicals/substances that could potentially contaminate the water supply only if released into the environment. Both unregulated sites from business location databases and regulated sites from various KDHE databases were compiled. Additional sites could have been added by an evaluator through the assessment process to supplement the original data.

The 1987 Standard Industrial Classifications (SIC) were used to identify potential contaminate sites. The SIC system classifies establishments into industries on the basis of the primary activities of the establishment.

Each assessment area is delineated with 3 assessment zones. These zones can be used to get a general understanding of the potential influence sites have based on proximity to the water supply. Zone A is a 100-foot radius around a groundwater well and a 1000-foot radius around a surface water intake. Zone B is a 2000-foot radius around wells and a hydrological delineated buffer around the surface water sources. Zone C is a 2-mile radius around wells and the balance of the watershed for intakes. The potential sources listed in this section are sorted to show all the potential sources in Zone A first, Zone B second, and Zone C third.

Although a facility or business is identified in the study as a potential concern, it does not necessarily mean a release or spill has occurred. Contamination could only occur if certain chemical substances are released into the environment and filter into the water supply source.

The data for the potential sources of contamination was compiled from May through August in 2002. Some of the databases used were incomplete datasets that are continually being updated. Due to the incompleteness, inaccuracies, and new development, it is possible that sources of potential contamination that are in the assessment area are not included in the report. Inaccurate locations could also cause sources to show up in the assessment area that are not actually in the assessment. Additionally, duplication between the datasets could cause sites to show up multiple times in the assessment area.

Potential Sources

Public Water Supply: **KANSAS ARMY AMMUNITION PLANT**
Assessment Area: **987**

Unregulated Potential Site Sources

Source No.	SIC Description	SIC ID	Zone
153706	General Farm, Primarily Crop	191	B
157042	General Farm, Primarily Crop	191	B
192358	Cattle Farm	211	B
153832	Dairy Farms	241	B
159562	Dairy Farms	241	B
154876	Veterinary Services, Specialties	742	B
153279	Oil and Gas Field services	1389	B
153289	Oil and Gas Field services	1389	B
154622	Oil and Gas Field services	1389	B
153843	Rock Quarry	1429	B
101379	Single-family Housing Construction	1521	B
153702	Single-family Housing Construction	1521	B
153829	Single-family Housing Construction	1521	B
154782	Single-family Housing Construction	1521	B
155076	Single-family Housing Construction	1521	B
157146	Single-family Housing Construction	1521	B
158847	Single-family Housing Construction	1521	B
155196	Nonresidential Construction	1542	B

Unregulated Potential Site Sources

Source No.	SIC Description	SIC ID	Zone
154674	Highway and Street Construction	1611	B
155366	Meat Packing Plant Manufacturing	2011	B
153288	Prefabricated Wood Buildings Manufacturing	2452	B
158843	Newspapers Publishing and Printing	2711	B
152683	Cement, Hydraulic Manufacturing	3241	B
154716	Cement, Hydraulic Manufacturing	3241	B
155100	Metal Doors, Sash, and Trim Manufacturing	3442	B
153299	Machinery, Except Electrical Manufacturing	3599	B
153193	Cathode Ray Television Picture Tubes Manufacturing	3672	B
154648	Transportation Equipment Manufacturing	3799	B
154623	Local Trucking, without Storage	4212	B
157171	Local Trucking, without Storage	4212	B
101380	Farm Product Warehousing and Storage	4221	B
154624	Farm Product Warehousing and Storage	4221	B
157147	Farm Product Warehousing and Storage	4221	B
157160	Farm Product Warehousing and Storage	4221	B
158799	Farm Product Warehousing and Storage	4221	B
159695	Farm Product Warehousing and Storage	4221	B

Unregulated Potential Site Sources

Source No.	SIC Description	SIC ID	Zone
101399	Combination Utility Services, nec	4939	B
158856	Refuse Systems	4953	B
153827	Farm and Garden Machinery	5083	B
153830	Farm and Garden Machinery	5083	B
153218	Petroleum Bulk Stations and Terminals (Truck Farm)	5171	B
154880	Petroleum Bulk Stations and Terminals (Truck Farm)	5171	B
155071	Gasoline Service Station	5541	B
158985	Gasoline Service Station	5541	B
159539	Gasoline Service Station	5541	B
155231	Recreational vehicle sales and repair	5561	B
155099	Top, Body, and Upholstery Repair Shops and Paint Shops	7532	B
158890	Top, Body, and Upholstery Repair Shops and Paint Shops	7532	B
158926	Top, Body, and Upholstery Repair Shops and Paint Shops	7532	B
101388	Auto Truck Repair Service	7538	B
153807	Auto Truck Repair Service	7538	B
154643	Auto Truck Repair Service	7538	B
155064	Auto Truck Repair Service	7538	B
155096	Auto Truck Repair Service	7538	B

Unregulated Potential Site Sources

Source No.	SIC Description	SIC ID	Zone
155364	Auto Truck Repair Service	7538	B
158840	Auto Truck Repair Service	7538	B
158891	Auto Truck Repair Service	7538	B
155089	Car Wash	7542	B
158992	Car Wash	7542	B
154680	Repair Services, Nec	7699	B
155078	Repair Services, Nec	7699	B
155193	Repair Services, Nec	7699	B
157168	Repair Services, Nec	7699	B
154651	Racing, Including Track Operation	7948	B
153268	General Farm, Primarily Crop	191	C
153809	General Farm, Primarily Crop	191	C
155306	General Farm, Primarily Crop	191	C
157356	Cattle Farm	211	C
153811	Dairy Farms	241	C
152803	Veterinary Services, Specialties	742	C
152804	Veterinary Services, Specialties	742	C
153287	Veterinary Services, Specialties	742	C
153806	Veterinary Services, Specialties	742	C
153821	Veterinary Services, Specialties	742	C
154826	Veterinary Services, Specialties	742	C
157214	Veterinary Services, Specialties	742	C
157314	Veterinary Services, Specialties	742	C

Unregulated Potential Site Sources

Source No.	SIC Description	SIC ID	Zone
158793	Veterinary Services, Specialties	742	C
152822	Animal Specialty Services	752	C
153059	Animal Specialty Services	752	C
153303	Animal Specialty Services	752	C
153834	Animal Specialty Services	752	C
153267	Drilling Oil and Gas Wells	1381	C
154781	Drilling Oil and Gas Wells	1381	C
101402	Oil and Gas Field services	1389	C
152730	Oil and Gas Field services	1389	C
152861	Oil and Gas Field services	1389	C
153031	Oil and Gas Field services	1389	C
153156	Oil and Gas Field services	1389	C
153157	Oil and Gas Field services	1389	C
153163	Oil and Gas Field services	1389	C
153173	Oil and Gas Field services	1389	C
153318	Oil and Gas Field services	1389	C
153302	Rock Quarry	1429	C
155244	Rock Quarry	1429	C
152687	Single-family Housing Construction	1521	C
152802	Single-family Housing Construction	1521	C
153001	Single-family Housing Construction	1521	C
153040	Single-family Housing Construction	1521	C
153103	Single-family Housing Construction	1521	C

Unregulated Potential Site Sources

Source No.	SIC Description	SIC ID	Zone
153139	Single-family Housing Construction	1521	C
153244	Single-family Housing Construction	1521	C
153308	Single-family Housing Construction	1521	C
153309	Single-family Housing Construction	1521	C
153319	Single-family Housing Construction	1521	C
153728	Single-family Housing Construction	1521	C
154659	Single-family Housing Construction	1521	C
154842	Single-family Housing Construction	1521	C
155103	Single-family Housing Construction	1521	C
156974	Single-family Housing Construction	1521	C
158794	Single-family Housing Construction	1521	C
159024	Single-family Housing Construction	1521	C
152940	Nonresidential Construction	1542	C
154892	Nonresidential Construction	1542	C
152688	Highway and Street Construction	1611	C
154991	Highway and Street Construction	1611	C
158968	Highway and Street Construction	1611	C
153746	Meat Packing Plant Manufacturing	2011	C
154938	Meat Packing Plant Manufacturing	2011	C
157253	Meat Packing Plant Manufacturing	2011	C
153232	Prepared Feeds For Animals and Fowls	2048	C
154904	Prepared Feeds For Animals and Fowls	2048	C
154786	Animal and Marine Fats and Oils Manufacturing	2077	C

Unregulated Potential Site Sources

Source No.	SIC Description	SIC ID	Zone
152799	Wood Kitchen Cabinets Manufacturing	2434	C
154787	Wood Pallets and Skids Manufacturing	2448	C
154827	Wood Pallets and Skids Manufacturing	2448	C
156948	Wood Pallets and Skids Manufacturing	2448	C
153261	Metal Partitions and Fixtures Manufacturing	2542	C
159566	Metal Partitions and Fixtures Manufacturing	2542	C
152786	Furniture and Fixtures Manufacturing	2599	C
152849	Newspapers Publishing and Printing	2711	C
152913	Newspapers Publishing and Printing	2711	C
153786	Newspapers Publishing and Printing	2711	C
154698	Newspapers Publishing and Printing	2711	C
155148	Newspapers Publishing and Printing	2711	C
157294	Newspapers Publishing and Printing	2711	C
159551	Newspapers Publishing and Printing	2711	C
152690	Commercial Printing–Lithographic	2752	C
152885	Commercial Printing–Lithographic	2752	C
152691	Commercial Printing NEC	2759	C
154779	Commercial Printing NEC	2759	C
155044	Commercial Printing NEC	2759	C
155056	Commercial Printing NEC	2759	C
154788	Industrial Inorganic Chemicals Manufacturing	2819	C

Unregulated Potential Site Sources

Source No.	SIC Description	SIC ID	Zone
152774	Rubber and plastics hose and belting Manufacturing	3052	C
154776	Rubber and plastics hose and belting Manufacturing	3052	C
152736	Plastics products Manufacturing	3089	C
154789	Plastics products Manufacturing	3089	C
154823	Concrete Products Manufacturing	3272	C
156949	Ready-mix Concrete Plant	3273	C
156976	Ready-mix Concrete Plant	3273	C
159012	Ready-mix Concrete Plant	3273	C
159559	Mineral Wool Manufacturing	3296	C
152692	Fabricated Metal Products Manufacturing	3499	C
154762	Pumps and Pumping Equipment Manufacturing	3561	C
152693	Machinery, Except Electrical Manufacturing	3599	C
153155	Machinery, Except Electrical Manufacturing	3599	C
154686	Machinery, Except Electrical Manufacturing	3599	C
154790	Machinery, Except Electrical Manufacturing	3599	C

Unregulated Potential Site Sources

Source No.	SIC Description	SIC ID	Zone
154908	Machinery, Except Electrical Manufacturing	3599	C
154945	Machinery, Except Electrical Manufacturing	3599	C
153032	Motor Vehicles and Car Bodies Manufacturing	3711	C
153252	Motor Vehicles and Car Bodies Manufacturing	3711	C
154791	Motor vehicle Parts and Accessories Manufacturing	3714	C
153256	Boat Building and Repairing Shop Manufacturing	3732	C
154857	Boat Building and Repairing Shop Manufacturing	3732	C
152694	Travel trailers and Campers Manufacturing	3792	C
159023	Signs and Advertising Display Manufacturing	3993	C
156992	Local Trucking, without Storage	4212	C
157031	Local Trucking, without Storage	4212	C
159552	Local Trucking, without Storage	4212	C
155599	Farm Product Warehousing and Storage	4221	C
157346	Farm Product Warehousing and Storage	4221	C

Unregulated Potential Site Sources

Source No.	SIC Description	SIC ID	Zone
152696	Refuse Systems	4953	C
153779	Refuse Systems	4953	C
153799	Refuse Systems	4953	C
155246	Refuse Systems	4953	C
155263	Refuse Systems	4953	C
152732	Construction and Mining Machinery	5082	C
153245	Construction and Mining Machinery	5082	C
152986	Farm and Garden Machinery	5083	C
153243	Farm and Garden Machinery	5083	C
153271	Farm and Garden Machinery	5083	C
153833	Farm and Garden Machinery	5083	C
154792	Farm and Garden Machinery	5083	C
154793	Farm and Garden Machinery	5083	C
159021	Farm and Garden Machinery	5083	C
152763	Scrap and Waste Materials	5093	C
155256	Scrap and Waste Materials	5093	C
153152	Petroleum Bulk Stations and Terminals (Truck Farm)	5171	C
154920	Petroleum Bulk Stations and Terminals (Truck Farm)	5171	C
157217	Petroleum Bulk Stations and Terminals (Truck Farm)	5171	C
157288	Petroleum Bulk Stations and Terminals (Truck Farm)	5171	C

Unregulated Potential Site Sources

Source No.	SIC Description	SIC ID	Zone
152760	Gasoline Service Station	5541	C
153772	Gasoline Service Station	5541	C
154753	Gasoline Service Station	5541	C
154915	Gasoline Service Station	5541	C
155023	Gasoline Service Station	5541	C
155601	Gasoline Service Station	5541	C
156953	Gasoline Service Station	5541	C
157329	Gasoline Service Station	5541	C
152776	Recreational vehicle sales and repair	5561	C
155229	Mobile Home Park	6515	C
155254	Recreational Vehicle Parks and Campsites	7033	C
153184	Photofinishing Laboratory	7384	C
152708	Top, Body, and Upholstery Repair Shops and Paint Shops	7532	C
152764	Top, Body, and Upholstery Repair Shops and Paint Shops	7532	C
152840	Top, Body, and Upholstery Repair Shops and Paint Shops	7532	C
152891	Top, Body, and Upholstery Repair Shops and Paint Shops	7532	C
152964	Top, Body, and Upholstery Repair Shops and Paint Shops	7532	C

Unregulated Potential Site Sources

Source No.	SIC Description	SIC ID	Zone
153106	Top, Body, and Upholstery Repair Shops and Paint Shops	7532	C
154913	Top, Body, and Upholstery Repair Shops and Paint Shops	7532	C
154972	Top, Body, and Upholstery Repair Shops and Paint Shops	7532	C
155224	Top, Body, and Upholstery Repair Shops and Paint Shops	7532	C
155265	Top, Body, and Upholstery Repair Shops and Paint Shops	7532	C
155607	Top, Body, and Upholstery Repair Shops and Paint Shops	7532	C
157324	Top, Body, and Upholstery Repair Shops and Paint Shops	7532	C
152872	Auto Truck Repair Service	7538	C
152903	Auto Truck Repair Service	7538	C
152912	Auto Truck Repair Service	7538	C
153051	Auto Truck Repair Service	7538	C
153055	Auto Truck Repair Service	7538	C
153107	Auto Truck Repair Service	7538	C
153270	Auto Truck Repair Service	7538	C
153717	Auto Truck Repair Service	7538	C
153727	Auto Truck Repair Service	7538	C

Unregulated Potential Site Sources

Source No.	SIC Description	SIC ID	Zone
153820	Auto Truck Repair Service	7538	C
154666	Auto Truck Repair Service	7538	C
154754	Auto Truck Repair Service	7538	C
155152	Auto Truck Repair Service	7538	C
155232	Auto Truck Repair Service	7538	C
155602	Auto Truck Repair Service	7538	C
156960	Auto Truck Repair Service	7538	C
157248	Auto Truck Repair Service	7538	C
157337	Auto Truck Repair Service	7538	C
159009	Auto Truck Repair Service	7538	C
153153	Car Wash	7542	C
154867	Car Wash	7542	C
153802	Repair Services, Nec	7699	C
154752	Repair Services, Nec	7699	C
154922	Repair Services, Nec	7699	C
156970	Repair Services, Nec	7699	C
157307	Repair Services, Nec	7699	C
152713	Golf Course	7992	C
153813	Golf Course	7992	C
155222	Golf Course	7992	C

Regulated Confined Animal Feeding Operations Potential Site Sources

Source No.	Source Name	ID/Permit No.	Zone
2000300	Sterling, Merle	A-NEAL-S012	B

Regulated Confined Animal Feeding Operations Potential Site Sources

Source No.	Source Name	ID/Permit No.	Zone
2000385	Circle L Dairy	A-NECR-M006	B
2000535	Watts Dairy, Michael	A-NENO-M012	B
2000577	Daniels, Rick	A-NENO-M005	B
2000632	Mcbride, Jack	A-NECF-BA02	B
2000933	Gilbert, Richard D.	A-NECF-BA03	B
2001001	Bahr, Rudolph	A-NECF-BA01	B
2001251	4-s Farms	A-NENO-S005	B
2001302	Stich, William A	A-NENO-S002	B
2001557	Brazle, Frank (schultz Place)	A-NENO-BA04	B
2001785	Brazle, Frank K. (hasty)	A-NENO-BA05	B
2001972	Simon Brothers	A-NECR-BA01	B
2001989	Gilbert, Raymond	A-NECF-BA04	B
2002038	Mcdaniel, Thane L.	A-MCAN-BA02	B
2002322	Ensminger Seed	A-NEAL-BA01	B
2000251	Thompson, Gary	A-NEAL-MA24	C
2000433	Leis Farms	A-NEWO-SA01	C
2000448	Allen, Coy	A-NEWO-S006	C
2000696	Hauser, David	A-NEAL-M013	C
2000707	Lower, John And Don	A-NEAL-MA09	C
2000835	Coltrane, Doug	A-NEAL-M011	C
2000915	Edwards, Donald	A-NEWO-BA01	C
2000938	Reinhardt Farm	A-NENO-BA02	C
2000999	Mueller Dairy	A-NEAL-M012	C

Regulated Confined Animal Feeding Operations Potential Site Sources

Source No.	Source Name	ID/Permit No.	Zone
2001068	Bunnel, Russell	A-MCAN-M010	C
2001115	Sprague, Max	A-NEAL-S005	C
2001220	Stich, William	A-NENO-M001	C
2001222	Amershek Dairy	A-NECR-M002	C
2001290	Setter Farms	A-NEAL-B001	C
2001301	Holloway, Neil W.	A-MCAN-S027	C
2001636	Nelson, Raebern	A-NEWL-S001	C
2001674	Brungardt Dairy	A-NENO-M010	C
2001839	J R Farms	A-NENO-S020	C
2001888	Sailors Stock Farm	A-NENO-S001	C
2002049	Brazle, Frank (home)	A-NENO-BA03	C
2002107	Strickler Holstein Farm	A-NEAL-M003	C
2002711	Black Jack Feeders, Llc	A-NEWO-C001	C
2002883	National Farms Feedlots	A-NELB-C001	C

Regulated Hazardous Waste Potential Site Sources

Did Not Contain Any Of These Potential Site Sources

Regulated Leaking Storage Tank Potential Site Sources

Source No.	Source Name	ID/Permit No.	Zone
3001788	Conoco	26910	B

Regulated Leaking Storage Tank Potential Site Sources

Source No.	Source Name	ID/Permit No.	Zone
3001976	Hall's Food Mart	27737	B
3000107	Fina, Chard	01338	C
3000156	Rodgers Oil Co	01844	C
3000192	Jerrys Oil Co	02218	C
3000193	Gaulding Oil	02221	C
3000244	Carders Philmart #2	02933	C
3000651	Johnson's General Store #38	06752	C
3000754	Coastal Mart #2547	07274	C
3001096	Fina, Jims	16165	C
3001335	Wolf Creek Nuclear Operating	23762	C
3001392	Taylor Petroleum #616	25032	C
3001592	Carder Philmart	26069	C
3001593	Carder's Philmart #1	26070	C
3002402	Crescent Oil	40167	C

Regulated Identified Contaminated Potential Site Sources

Source No.	Source Name	ID/Permit No.	Zone
7000363	BERG MANUFACTURING SITE #1	C300100005	B
7000364	BERG MANUFACTURING SITE #2	C300100006	B
7000367	PRIME WESTERN SMELTER (OLD); GAS CITY, KS	C300100029	B

Regulated Identified Contaminated Potential Site Sources

Source No.	Source Name	ID/Permit No.	Zone
7000368	WEBSTER/MILLER REFINERY	C300100189	B
7000370	EMPRISE BANK/COBERLY RECYCLING	C300103000	B
7000371	EAST IOLA SMELTER SITE	C300103004	B
7000374	HISER IMPLEMENT	C300170948	B
7000375	WILLIAMS NATURAL GAS – HUMBOLDT COMP STN POND CLSR	C300171385	B
7000466	CHANUTE LANDFILL	C306700011	B
7000469	WESTERN PETROCHEMICAL CO.	C306700037	B
7000365	BERG MANUFACTURING SITE #3	C300100007	C
7000366	BERG MANUFACTURING SITE #4	C300100008	C
7000369	IMP BOAT, IOLA	C300100341	C
7000372	EAST LA HARPE SMELTER SITE	C300103005	C
7000373	WEST LA HARPE SMELTER SITE	C300103006	C
7000465	WESTERN PETROCHEMICAL (NEOSHO #1)	C306700004	C
7000467	MARCO (MID AMERICA REFINING CO)	C306700025	C
7000468	WESTERN PETROCHEMICAL (NEOSHO #2)	C306700028	C
7000470	PILLOT, JOE	C306700044	C
7000471	GREAT WESTERN REFINERY AND PIPELINE	C306700194	C

Regulated Solid Waste Potential Site Sources

Source No.	Source Name	ID/Permit No.	Zone
5000043	Allen County	0101-S	B

Regulated Solid Waste Potential Site Sources

Source No.	Source Name	ID/Permit No.	Zone
5000124	Neosho County	0146-S	B
5000158	Monarch Cement Co.	0171-S	B
5000280	City of Fowler	0270-S	B
5000284	City of Chanute	0274-S	B
5000298	Saueressig Construction	0288-S	B
5000353	Ash Grove Cement Co.	0345-S	B
5000459	Jerry Phillips	0442-S	B
5000505	Dean Sutcliffe	0489-S	B
5000611	City of Iola	0598-S	B
5000639	City of Chanute	0628-S	B
5000874	Monarch Cement Company	2014-T	B
5000036	Great Plains Environmental	-S	C
5000165	Ash Grove Cement Co.	0177-S	C
5000253	Woodson Sanitation Co.	0249-S	C
5000306	Coffey County	0297-S	C
5000346	Walton Foundry	0338-S	C
5000349	Kansas Gas and Electric	0341-S	C
5000418	Walton Foundry	0409-S	C
5000471	Chanute Manufacturing Co, Inc.	0454-S	C
5000536	Ash Grove Cement Co.	0522-S	C
5000602	Marvin Boyer	0589-S	C
5000661	City of Iola	0649-S	C
5000665	Ash Grove Cement Co.	0653-S	C

Regulated Solid Waste Potential Site Sources

Source No.	Source Name	ID/Permit No.	Zone
5000674	Woodson County	0662-S	C
5000692	Minority Resources, Inc.	0670-S	C
5000777	Larry G. Hammerbacher	0752-S	C
5000785	Ash Grove Cement Co.	0759-S	C
5000790	Coffey County HHW	0764-S	C
5000888	Randee Inc. Dba Eastside Tire	2048-T	C
5000916	Yoho Son Tire Cutting Service	2087-T	C

Regulated Waste Water Potential Site Sources

Source No.	Source Name	ID/Permit No.	Zone
6000195	MONARCH CEMENT COMPANY	I-NE36-PO03	B
6000264	BURLINGTON MWTP	M-NE07-OO01	B
6000823	SO. KS. OKLAHOMA R.R.- CHANUTE	I-NE11-NO04	B
6000825	ASH GROVE CEMENT - CHANUTE	I-NE11-PO02	B
6000829	HUNT MIDWEST - SETTLEMYER	I-NE14-PO01	B
6000830	NELSON QUARRY - STRICKLER	I-NE14-PO02	B
6000839	MORNING GLORY DAIRY, INC.	I-NE25-NP01	B
6000841	NEOSHO COUNTY PUBLIC WORKS ERIE QUARRY	I-NE25-PO03	B
6000852	MONARCH CEMENT CO.	I-NE36-PO01	B
6000853	MONARCH CEMENT CO.	I-NE36-PO01	B
6000854	MONARCH CEMENT CO.	I-NE36-PO01	B

Regulated Waste Water Potential Site Sources

Source No.	Source Name	ID/Permit No.	Zone
6000860	IOLA POWER PLANT	I-NE37-CO01	B
6000862	HUNT MIDWEST – LONE ELM QUARRY	I-NE44-PO01	B
6000864	HARSHMAN CONST. – KISTNER QUARRY	I-NE51-PO03	B
6001587	BURLINGTON – MUNICIPAL PLT	M-NE07-OO02	B
6001590	CHANUTE	M-NE11-OO01	B
6001592	CHANUTE	M-NE11-OO01	B
6001593	CHANUTE	M-NE11-OO01	B
6001615	GRIDLEY MWTP	M-NE32-OO01	B
6001620	HUMBOLDT MWTP	M-NE36-OO01	B
6001621	HUMBOLDT MWTP	M-NE36-OO01	B
6001622	IOLA MWTP	M-NE37-IO01	B
6001623	IOLA MWTP	M-NE37-IO01	B
6001624	ALLEN CO. S.D. #1	M-NE37-OO02	B
6001628	LEROY MWTP	M-NE42-OO01	B
6001657	ST. PAUL	M-NE59-OO02	B
6001664	WALNUT	M-NE66-OO01	B
6001668	YATES CENTER MWTP	M-NE70-OO01	B
6001671	PETROLIA WWTF	M-NE76-NO01	B
6002023	AMERICAN METAL PRODUCTS, INC.	P-NE42-OO01	B
6000042	PARSONS OIL COMPANY	C-NE25-NO01	C
6000062	BUCKLIN BRANCH OFFERLE CO-OP GRAIN	I-AR13-PO01	C
6000187	CHANUTE POWER PLANT #1	I-NE11-PO03	C
6000192	NELSON QUARRY – ERIE/BEACHNER QUARRY	I-NE25-PO02	C

Regulated Waste Water Potential Site Sources

Source No.	Source Name	ID/Permit No.	Zone
6000265	LA HARPE	M-NE39-OO01	C
6000308	NELSON QUARRIES	I-NE59-PO01	C
6000457	CHATEAU VILLAGE WWTF	C-NE11-NO05	C
6000530	KANSAS ARMY AMMUNITION PLANT	F-NE55-PO04	C
6000816	WOLF CREEK NUCLEAR OPERATING CORPOR.	I-NE07-PO02	C
6000817	WOLF CREEK NUCLEAR OPERATING CORPOR.	I-NE07-PO02	C
6000818	WOLF CREEK NUCLEAR OPERATING CORPOR.	I-NE07-PO02	C
6000819	WOLF CREEK NUCLEAR OPERATING CORPOR.	I-NE07-PO02	C
6000820	WOLF CREEK NUCLEAR OPERATING CORPOR.	I-NE07-PO02	C
6000821	NELSON QUARRY – BURLINGTON	I-NE07-PO03	C
6000822	CHANUTE DIESEL POWER PLANT #3	I-NE11-CO01	C
6000824	CUSTOM CAMPERS	I-NE11-NO05	C
6000826	HARRY BYERS SONS	I-NE11-PO06	C
6000840	MIDWEST MINERALS – #7	I-NE25-PO01	C
6000846	NELSON QUARRY – STOKES QUARRY	I-NE30-PO01	C
6000855	MONARCH CEMENT CO.	I-NE36-PO01	C
6000856	MONARCH CEMENT CO.	I-NE36-PO01	C
6000857	MONARCH CEMENT CO.	I-NE36-PO01	C
6000858	MONARCH CEMENT CO.	I-NE36-PO01	C
6000859	MONARCH CEMENT CO.	I-NE36-PO01	C
6000861	ALLEN COUNTY QUARRY	I-NE39-PO01	C
6001591	CHANUTE	M-NE11-OO01	C
6001594	WILSON CO. S.D. #1 (TULAKES)	M-NE11-OO04	C

Regulated Waste Water Potential Site Sources

Source No.	Source Name	ID/Permit No.	Zone
6001597	COLONY MWTP	M-NE14-OO01	C
6001609	ERIE MWTP	M-NE25-IO01	C
6001617	HEPLER MWTP	M-NE34-OO01	C
6001625	LAHARPE	M-NE39-OO02	C
6001636	NEW STRAWN	M-NE51-OO01	C
6001658	SAVONBURG MWTF	M-NE60-OO01	C
6001660	STARK MWTP	M-NE62-OO01	C
6001669	WOODSON CO. IMP. DIST. #2	M-NE72-OO02	C

Public Water Supply: **KANSAS ARMY AMMUNITION PLANT**
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Added Sources:

The Added Sources section lists all the sites that have been added as potential sources of contamination by an evaluator through the assessment process to supplement the original data.

The potential sources listed in this section are sorted to show the added potential sources in Zone A first, Zone B second, and Zone C third.

Although a facility or business was added as a potential concern, it does not necessarily mean a release or spill has occurred. Contamination could only occur if certain chemical substances are released into the environment and filter into the water supply source.

Added Sources

Public Water Supply: **KANSAS ARMY AMMUNITION PLANT**
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Added Potential Site Sources

Source No.	Source Name	SIC ID	Zone
9000680	Coffey County Recycling Center	0	B
9000679	Coffey County HHW Center	4953	B
9000673	Oil Station	5541	B
9000675	Convenience Store	5541	B
9000677	Gas station	5541	B
9000676	Car Wash	7542	B
9000678	Coffey County Subtitle D Landfill	10090	C
9000682	Convenience Store	5541	C
9000691	Car Wash	7542	C

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Potential Contaminants Summary:

The Contaminants Summary shows the number of identified unregulated sources in the assessment area for each contaminant of concern category.

In order to obtain the number of sources for each category, a relationship was correlated between each Standard Industrial Classification (SIC) and the contaminant of concern categories. Each SIC was assessed and associated with contaminant categories. For example, if not managed properly, a car wash (SIC 7542) could potentially contaminate an intake because of inorganic compounds (IOC) and volatile organic compounds (VOC); thus, a car wash is associated with IOCs and VOCs.

A chart displays a count for each contaminant category. The sum for each category represents the total number of identified sources that have been associated with that particular contaminant category. However, the total number of identified sources does not include contaminants from the Added Sources. In our example, a car wash would be considered 2 sources of contamination. It would be a potential source of contamination for IOCs and for VOCs; thus, 1 would be added to the total number of sources in the VOC category and 1 would be added to the IOC category.

Potential Contaminants Summary

Public Water Supply: **KANSAS ARMY AMMUNITION PLANT**

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Number of Unregulated Site Sources Identified for each Contaminant Category

MicroBiological	Sedimentation	Pesticides	IOC's	SOC's	VOC's	E – P
61	63	19	195	58	130	55

A – Microbiological

B2 – Sedimentation

C* – Pesticides

B – Inorganic Compounds

C – Synthetic Organic Compounds

D – Volatile Organic Compounds

B1 – Eutrophication – Phosphorous

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Potential Contaminants Listing:

The Potential Contaminants section lists the contaminant of concern category associated with each Standard Industrial Classification (SIC) found in an assessment area. A complete list of contaminant category codes are located at the bottom of this page.

The relationships defined between the Standard Industrial Classifications (SIC) and the contaminant of concern categories are displayed in a table format. Using our car wash example, the relationships can be better illustrated. A car wash could release IOC and VOC chemical substances. The connection is shown by indicating the SIC, 7542, and the associated contaminant categories, IOC (Category B) and VOC (Category D). However, the contaminants listed are not associated with any Added Sources.

The list is sorted by the SIC source description and it only shows unique SIC sources. For example, an assessment area can have 20 car washes in an assessment area, but the list is only going to show contaminant categories associated with car washes onetime. This is because all car washes have the same SIC and every car wash poses the same potential threat to water intakes.

A – Microbiological **B** – Inorganic Compounds **B1** – Eutrophication – Phosphorous
B2 – Sedimentation **B*** – Nitrates **C** – Synthetic Organic Compounds
C* – Pesticides **D** – Volatile Organic Compounds

Potential Contaminants Listing

Public Water Supply: **KANSAS ARMY AMMUNITION PLANT**

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Unregulated Identified Site Sources and associated Potential Contaminant Category

SIC ID	SIC Source	Potential Contaminant	Contaminant Category
2077	Animal and Marine Fats and Oils Manufacturing	BOD, oil and grease, TSS	A
"	"	"	B
7538	Auto Truck Repair Service	Inorganics, VOCs	B
"	"	"	D
3732	Boat Building and Repairing Shop Manufacturing	inorganics, VOCs	B
"	"	"	D
7542	Car Wash	Inorganics, VOCs	B
"	"	"	B1
"	"	"	B2
"	"	"	D
3672	Cathode Ray Television Picture Tubes Manufacturing	inorganics, VOCs	B
"	"	"	D
211	Cattle Farm	Sanitary, Fertilizers TSS, pesticides, Erosion and sedimentation	A
"	"	"	B
"	"	"	B1
"	"	"	B2
"	"	"	B*

Unregulated Identified Site Sources and associated Potential Contaminant Category.

SIC ID	SIC Source	Potential Contaminant	Contaminant Category
211	Cattle Farm	Sanitary, Fertilizers TSS, pesticides, Erosion and sedimentation	C*
3241	Cement, Hydraulic Manufacturing	Minerals and TSS	B
4939	Combination Utility Services, nec	Inorganics, VOCs	B
"	"	"	D
3272	Concrete Products Manufacturing	Minerals and TSS	B
5082	Construction and Mining Machinery	NA	NA
1381	Drilling Oil and Gas Wells	Oil, Salt Water	B
"	"	"	C
3499	Fabricated Metal Products Manufacturing	inorganics, VOCs	B
"	"	"	D
2599	Furniture and Fixtures Manufacturing	TSS, VOCs	B
"	"	"	D
5541	Gasoline Service Station	Inorganics, VOCs	B
"	"	"	D
7992	Golf Course	Fertilizers and pesticides	A
"	"	"	B1
"	"	"	B2
"	"	"	B*
"	"	"	C*

Unregulated Identified Site Sources and associated Potential Contaminant Category.

SIC ID	SIC Source	Potential Contaminant	Contaminant Category
1611	Highway and Street Construction	Sedimentation	B2
2819	Industrial Inorganic Chemicals Manufacturing	metals, solvents	B
"	"	"	D
4212	Local Trucking, without Storage	VOCs	D
3599	Machinery, Except Electrical Manufacturing	inorganics, VOCs	B
"	"	"	D
2011	Meat Packing Plant Manufacturing	BOD, pathogens, Oil and grease	A
"	"	"	B*
3442	Metal Doors, Sash, and Trim Manufacturing	inorganics	B
"	"	"	D
2542	Metal Partitions and Fixtures Manufacturing	VOCs	D
3296	Mineral Wool Manufacturing	Metals, minerals and TSS	B
6515	Mobile Home Park	Sanitary wastes, Fertilizers	A
"	"	"	B
"	"	"	B1
"	"	"	B*
3711	Motor Vehicles and Car Bodies Manufacturing	inorganics, VOCs	B
"	"	"	D
3714	Motor vehicle Parts and Accessories Manufacturing	inorganics, VOCs	B

Unregulated Identified Site Sources and associated Potential Contaminant Category.

SIC ID	SIC Source	Potential Contaminant	Contaminant Category
3714	Motor vehicle Parts and Accessories Manufacturing	inorganics, VOCs	D
1542	Nonresidential Construction	Sedimentation	B2
1389	Oil and Gas Field services	Oil, Salt Water	B
"	"	"	C
5171	Petroleum Bulk Stations and Terminals (Truck Farm)	Inorganics, VOCs	B
"	"	"	D
7384	Photofinishing Laboratory	NA	B
"	"	"	D
3089	Plastics products Manufacturing	inorganics, VOCs	B
"	"	"	D
2452	Prefabricated Wood Buildings Manufacturing	TSS	B
"	"	"	D
3561	Pumps and Pumping Equipment Manufacturing	inorganics, VOCs	B
"	"	"	D
3273	Ready-mix Concrete Plant	Minerals and TSS	B
7033	Recreational Vehicle Parks and Campsites	sanitary, fertilizers, pesticides	A
"	"	"	B
"	"	"	B1
"	"	"	B*

Unregulated Identified Site Sources and associated Potential Contaminant Category.

SIC ID	SIC Source	Potential Contaminant	Contaminant Category
7033	Recreational Vehicle Parks and Campsites	sanitary, fertilizers, pesticides	C*
1429	Rock Quarry	Sedimentation	B2
3052	Rubber and plastics hose and belting Manufacturing	Inorganics, metals, VOCs	B
"	"	"	D
5093	Scrap and Waste Materials	Metals, TSS	B
3993	Signs and Advertising Display Manufacturing	inorganics, VOCs	B
"	"	"	D
1521	Single-family Housing Construction	Oil, Paint, Pesticides, Fertilizers	A
"	"	"	B1
"	"	"	B2
"	"	"	B*
"	"	"	C
7532	Top, Body, and Upholstery Repair Shops and Paint Shops	Inorganics, VOCs	B
"	"	"	D
3799	Transportation Equipment Manufacturing	inorganics, VOCs	B
"	"	"	D
3792	Travel trailers and Campers Manufacturing	inorganics, VOCs	B
"	"	"	D
742	Veterinary Services, Specialties	Sanitary, Inorganics TSS	A

Unregulated Identified Site Sources and associated Potential Contaminant Category.

SIC ID	SIC Source	Potential Contaminant	Contaminant Category
742	Veterinary Services, Specialties	Sanitary, Inorganics TSS	B
2434	Wood Kitchen Cabinets Manufacturing	TSS, VOCs	B
"	"	"	D
2448	Wood Pallets and Skids Manufacturing	TSS, VOCs	B
"	"	"	D
752	Animal Specialty Services	Sanitary, fertilizers	A
"	"	"	B
"	"	"	B1
"	"	"	B2
"	"	"	B*
2759	Commercial Printing NEC	Inorganics, VOCs, Semi volatiles	B
"	"	"	C
"	"	"	D
2752	Commercial Printing–Lithographic	Inorganics, VOCs, Semi volatiles	B
"	"	"	C
"	"	"	D
241	Dairy Farms	Sanitary, fertilizers	A
"	"	"	B
"	"	"	B1

Unregulated Identified Site Sources and associated Potential Contaminant Category.

SIC ID	SIC Source	Potential Contaminant	Contaminant Category
241	Dairy Farms	Sanitary, fertilizers	B2
"	"	"	B*
4221	Farm Product Warehousing and Storage	TSS, VOCs	B
"	"	"	D
5083	Farm and Garden Machinery	inorganics	B
191	General Farm, Primarily Crop	fertilizers, Pesticides	B
"	"	"	B1
"	"	"	B2
"	"	"	B*
"	"	"	C*
2711	Newspapers Publishing and Printing	Inorganics, VOCs, Semi volatiles	B
"	"	"	C
"	"	"	D
2048	Prepared Feeds For Animals and Fowls	Sanitary, Nitrates, phosphorous and pesticides	A
"	"	"	B
"	"	"	B1
"	"	"	B2
"	"	"	B*
"	"	"	C*

Unregulated Identified Site Sources and associated Potential Contaminant Category.

SIC ID	SIC Source	Potential Contaminant	Contaminant Category
7948	Racing, Including Track Operation		NA
5561	Recreational vehicle sales and repair	Inorganics	B
4953	Refuse Systems	ALL	A
"	"	"	B
"	"	"	B1
"	"	"	B2
"	"	"	B*
"	"	"	C
"	"	"	C*
"	"	"	D
7699	Repair Services, Nec	inorganics	B

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Protection Measures:

The Protection Measures section shows water quality protection measures for the Standard Industrial Classifications (SIC) identified in the assessment area.

Previous sections of this report are designed to show areas that Public Water Supplies (PWS) can focus on to improve the susceptibility of an assessment area. This section helps identify water quality protection measures that a PWS can use as guidance for implementing action for a potential contaminant site in the assessment area. It focuses on protection measures that can reduce the risk of contamination to the water supply.

This portion of the report only displays water quality protection measures for each type of SIC found in the assessment area. It does not display protection measures for each site in the assessment area because every SIC should have the same or similar water quality protection management practices. However, the protection measures listed are not associated with any Added Sources.

Protection Measures

Public Water Supply: **KANSAS ARMY AMMUNITION PLANT**

Assessment Area: **987**

Recommended Water Quality Protection Measures

SIC	SIC Source	Contaminant Source	Water Quality Protection Measure	Regulatory Authority
2077	Animal and Marine Fats and Oils Manufacturing	BOD, oil and grease, TSS	Wastewater pretreatment and/or discharge to a POTW. Grounds maintenance and cleanup. Fat traps on sewer lines.	40 CFR 122 and State or federal Storm water pollution prevention regulations
7538	Auto Truck Repair Service	Inorganics, VOCs	Discharge to POTW. Manage oil products and used oil so that it is not in contact with water	40 CFR 442 and
3732	Boat Building and Repairing Shop Manufacturing	inorganics, VOCs	Manage wastes properly and treat process wastewater prior to discharge to a POTW or direct. Recycle where possible. Manage chemicals carefully	State or federal Storm water pollution prevention regulations
7542	Car Wash	Inorganics, VOCs	Install and maintain sediment and grease traps where appropriate	40 CFR 442
3672	Cathode Ray Television Picture Tubes Manufacturing	inorganics, VOCs	Manage wastes properly and treat process wastewater prior to discharge to a POTW or direct	40 CFR 469 and State or federal Storm water pollution prevention regulations
211	Cattle Farm	Sanitary, Fertilizers TSS, pesticides, Erosion and sedimentation	Proper application of fertilizers and pesticides. Proper cleaning of equipment and disposal of chemicals. Maintain riparian areas along waterways and keep cattle out of these areas. Proper Waste Management and Grazing Management.	KDHE—Livestock Waste Management Section, KAR 28–16, KDA, County Soil Conservation District, NRCS

Recommended Water Quality Protection Measures

SIC	SIC Source	Contaminant Source	Water Quality Protection Measure	Regulatory Authority
3241	Cement, Hydraulic Manufacturing	Minerals and TSS	Minimize outdoor storage and control storm water runoff.	40 CFR 411 and State or federal Storm water pollution prevention regulations
4939	Combination Utility Services, nec	Inorganics, VOCs	Maintain secondary containment for fuel storage and fueling areas. Maintain and inspect. Effect repairs promptly	NA
3272	Concrete Products Manufacturing	Minerals and TSS	Minimize outdoor storage and control storm water runoff.	State or federal Storm water pollution prevention regulations
5082	Construction and Mining Machinery	NA	Discharge to POTW	NA
1381	Drilling Oil and Gas Wells	Oil, Salt Water	Drill water retention and treatment	KAR 28–41, 45, 40 CFR 435
3499	Fabricated Metal Products Manufacturing	inorganics, VOCs	Manage wastes properly and treat process wastewater prior to discharge to a POTW or direct	State or federal Storm water pollution prevention regulations

Recommended Water Quality Protection Measures

SIC	SIC Source	Contaminant Source	Water Quality Protection Measure	Regulatory Authority
2599	Furniture and Fixtures Manufacturing	TSS, VOCs	Discharge of process waters to POTW.	State or federal Storm water pollution prevention regulations
5541	Gasoline Service Station	Inorganics, VOCs	Maintain area to minimize fuel contamination	NA
7992	Golf Course	Fertilizers and pesticides	Proper application of fertilizers and pesticides. Proper cleaning of equipment and disposal of chemicals.	KDHE, KAR 28-16
1611	Highway and Street Construction	Sedimentation	Erosion and Sediment Control	KAR 28-16, KDHE
2819	Industrial Inorganic Chemicals Manufacturing	metals, solvents	Recycle chemical wastes where possible.	40 CFR 415 and State or federal Storm water pollution prevention regulations
4212	Local Trucking, without Storage	VOCs	Discharge to a POTW	State or federal Storm water pollution prevention regulations

Recommended Water Quality Protection Measures

SIC	SIC Source	Contaminant Source	Water Quality Protection Measure	Regulatory Authority
3599	Machinery, Except Electrical Manufacturing	inorganics, VOCs	Manage wastes properly and treat process wastewater prior to discharge to a POTW or direct	State or federal Storm water pollution prevention regulations
2011	Meat Packing Plant Manufacturing	BOD, pathogens, Oil and grease	Wastewater pretreatment and/or discharge to a POTW	40CFR 432 and State or federal Storm water pollution prevention regulations
3442	Metal Doors, Sash, and Trim Manufacturing	inorganics	Minimize outdoor storage and control storm water runoff. Pre-treat process wastewater prior to discharge to POTW	State or federal Storm water pollution prevention regulations
2542	Metal Partitions and Fixtures Manufacturing	VOCs	Discharge of process waters to POTW.	State or federal Storm water pollution prevention regulations
3296	Mineral Wool Manufacturing	Metals, minerals and TSS	Minimize outdoor storage and control storm water runoff. Pre-treat process wastewater prior to discharge to POTW	40 CFR 436 and State or federal Storm water pollution prevention regulations
6515	Mobile Home Park	Sanitary wastes, Fertilizers	Discharge to POTW. Minimize use of lawn chemicals	KAR 28-5

Recommended Water Quality Protection Measures

SIC	SIC Source	Contaminant Source	Water Quality Protection Measure	Regulatory Authority
3711	Motor Vehicles and Car Bodies Manufacturing	inorganics, VOCs	Manage wastes properly and treat process wastewater prior to discharge to a POTW or direct	State or federal Storm water pollution prevention regulations
3714	Motor vehicle Parts and Accessories Manufacturing	inorganics, VOCs	Manage wastes properly and treat process wastewater prior to discharge to a POTW or direct	40 CFR 464 and State or federal Storm water pollution prevention regulations
1542	Nonresidential Construction	Sedimentation	Erosion and Sediment Control	KAR 28–16, KDHE
1389	Oil and Gas Field services	Oil, Salt Water	Proper management of production wastes	KAR 28–41, 45, 40 CFR 435
5171	Petroleum Bulk Stations and Terminals (Truck Farm)	Inorganics, VOCs	Maintain secondary containment for fuel storage and fueling areas. Maintain and inspect. Effect repairs promptly	State or federal Storm water pollution prevention regulations
7384	Photofinishing Laboratory	NA	Discharge to POTW. Recycle chemicals	CFR 40 459

Recommended Water Quality Protection Measures

SIC	SIC Source	Contaminant Source	Water Quality Protection Measure	Regulatory Authority
3089	Plastics products Manufacturing	inorganics, VOCs	Pre-treat wastewater prior to discharge. Minimize outdoor storage and control storm water runoff.	40 CFR 463 and State or federal Storm water pollution prevention regulations
2452	Prefabricated Wood Buildings Manufacturing	TSS	Discharge of process waters to POTW. Minimize outdoor storage.	State or federal Storm water pollution prevention regulations
3561	Pumps and Pumping Equipment Manufacturing	inorganics, VOCs	Manage wastes properly and treat process wastewater prior to discharge to a POTW or direct	State or federal Storm water pollution prevention regulations
3273	Ready-mix Concrete Plant	Minerals and TSS	Minimize outdoor storage and control storm water runoff.	State or federal Storm water pollution prevention regulations
7033	Recreational Vehicle Parks and Campsites	sanitary, fertilizers, pesticides	Discharge to POTW. Minimize use of lawn chemicals	NA
1429	Rock Quarry	Sedimentation	Erosion and Sediment Control	KAR 28-16

Recommended Water Quality Protection Measures

SIC	SIC Source	Contaminant Source	Water Quality Protection Measure	Regulatory Authority
3052	Rubber and plastics hose and belting Manufacturing	Inorganics, metals, VOCs	Pre-treat wastewater prior to discharge. Minimize outdoor storage and control storm water runoff.	40 CFR 428 and State or federal Storm water pollution prevention regulations
5093	Scrap and Waste Materials	Metals, TSS	Minimize contact with storm water	State or federal Storm water pollution prevention regulations
3993	Signs and Advertising Display Manufacturing	inorganics, VOCs	Manage wastes properly and treat process wastewater prior to discharge to a POTW or direct	40 CFR 459 and State or federal Storm water pollution prevention regulations
1521	Single-family Housing Construction	Oil, Paint, Pesticides, Fertilizers	Proper cleaning and disposal of household hazardous waste. Proper storage, application, and clean up of pesticides and fertilizers	KAR 28-48, KDHE, KDEM
7532	Top, Body, and Upholstery Repair Shops and Paint Shops	Inorganics, VOCs	Discharge to POTW. Recycle where appropriate. Properly maintain oil product and waste. Manage paint and solvent wastes properly	NA
3799	Transportation Equipment Manufacturing	inorganics, VOCs	Manage wastes properly and treat process wastewater prior to discharge to a POTW or direct	40 CFR 464 and State or federal Storm water pollution prevention regulations

Recommended Water Quality Protection Measures

SIC	SIC Source	Contaminant Source	Water Quality Protection Measure	Regulatory Authority
3792	Travel trailers and Campers Manufacturing	inorganics, VOCs	Manage wastes properly and treat process wastewater prior to discharge to a POTW or direct	State or federal Storm water pollution prevention regulations
742	Veterinary Services, Specialties	Sanitary, Inorganics TSS	Discharge to POT	NA
2434	Wood Kitchen Cabinets Manufacturing	TSS, VOCs	Discharge of process waters to POTW. Minimize outdoor storage.	State or federal Storm water pollution prevention regulations
2448	Wood Pallets and Skids Manufacturing	TSS, VOCs	Discharge of process waters to POTW. Minimize outdoor storage.	State or federal Storm water pollution prevention regulations
752	Animal Specialty Services	Sanitary, fertilizers	Collect and treat wastes.	NA
2759	Commercial Printing NEC	Inorganics, VOCs, Semi volatiles	Recycle chemicals where possible. Discharge to POTW	40 CFR 459 and State or federal Storm water pollution prevention regulations

Recommended Water Quality Protection Measures

SIC	SIC Source	Contaminant Source	Water Quality Protection Measure	Regulatory Authority
2752	Commercial Printing–Lithographic	Inorganics, VOCs, Semi volatiles	Recycle chemicals where possible. Discharge to POTW	40 CFR 459 and State or federal Storm water pollution prevention regulations
241	Dairy Farms	Sanitary, fertilizers	Collect and treat process wastes. Use good erosion control practices. Minimize storm water contact with contaminants.	40 CFR 405
4221	Farm Product Warehousing and Storage	TSS, VOCs	Keep the area clean of grain. Use grease traps.	State or federal Storm water pollution prevention regulations
5083	Farm and Garden Machinery	inorganics	Discharge to POTW	NA
191	General Farm, Primarily Crop	fertilizers, Pesticides	Maintain good erosion control practices and minimize the use of chemicals	NA
2711	Newspapers Publishing and Printing	Inorganics, VOCs, Semi volatiles	Recycle chemicals where possible. Discharge to POTW	40 CFR 459 and State or federal Storm water pollution prevention regulations

Recommended Water Quality Protection Measures

SIC	SIC Source	Contaminant Source	Water Quality Protection Measure	Regulatory Authority
2048	Prepared Feeds For Animals and Fowls	Sanitary, Nitrates, phosphorous and pesticides	Maintain animal feeding areas and feed storage areas to minimize contact with storm water. Collect and treat process wastes.	40 CFR 412 and State or federal Storm water pollution prevention regulations
7948	Racing, Including Track Operation	NA	Discharge to POTW. Minimize use of lawn chemicals. Use good erosion control practices	NA
5561	Recreational vehicle sales and repair	Inorganics	Discharge to a POTW. Store oils and lubricants properly	Discharge to a POTW. Store oils and lubricants properly
4953	Refuse Systems	ALL	Store wastes properly in order to minimize contact with storm water.	Maintain the lagoon or storage vessel properly. Control storm water run on and runoff to minimize contamination of storm water
7699	Repair Services, Nec	inorganics	Discharge to POTW	NA

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Assessment Analysis:

The Assessment Analysis section displays the numbers assigned to each contaminant of concern category for each question in the susceptibility analysis.

This analysis is based on a decision tree framework consisting of a series of yes/no questions. These questions consider the proximity of contaminant sources to the water supply intake, the type of contaminant, and the application of pollution prevention or water quality protection practices to sources of contamination. As the evaluator moves through the analytical framework, susceptibility points are accumulated based on the presence of contaminant sources in the assessment area.

After all the questions have been answered, the SLS is calculated for each contaminant of concern category. The SLS is determined by counting the number of contamination risk factors found to occur in the delineated assessment area and applying a multiplier to this number. Because the number of contaminant category risk factors is not equal, the multiplier is used to establish a common scale for the SLS of each contaminant category.

Assessment Analysis

Public Water Supply: **KANSAS ARMY AMMUNITION PLANT**
Assessment Area: **987**

Surface Water Single Well Analysis

A – Microbiological **B** – Inorganic Compounds

B1 – Eutrophication – Phosphorous

B2 – Sedimentation **C** – Synthetic Organic Compounds

C* – Pesticides **D** – Volatile Organic Compounds

No.	Question	Response	A	B	B1	B2	C	C*	D
1	Is the intake located at a treatment plant?	Yes	0	0	0	0	0	0	0
2	Is there an open channel conveyance from the intake to the treatment plant?	No	0	0	0	0	0	0	0
3	Does a PWS own or control the conveyance right-of-way?	Yes	0	0	0	0	0	0	0
4	Does a PWS own or control the area within 1/4 mile of intake?	No	1	1	0	0	1	1	1
5	Is the area within 1/4 mile of the intake entirely native grass?	No	1	1	0	0	1	1	1
6	Is transportation infrastructure in close proximity to the intake?	No	0	0	0	0	0	0	0
7	Are there water quality protection plans for the transportation infrastructure?	Yes	0	0	0	0	0	0	0
8	Are any commercial, industrial, or urban areas present?	No	0	0	0	0	0	0	0
9	Does each industrial/commercial site and urban area have a water quality protection plan in place?	Yes	0	0	0	0	0	0	0
10	Is riparian area vegetated?	Yes	0	0	0	0	0	0	0
11	Has riparian area been farmed up to the stream/riverbank?	Yes	0	0	0	0	0	1	0
12	Is there a lack of native grass or trees?	No	0	0	0	0	0	1	0
13	Is livestock use present in riparian area?	Yes	1	0	0	0	0	1	0
14	Are any confined livestock production sites in riparian area?	Yes	1	0	0	0	0	1	0
15	Is each confinement area registered with KDHE?	No	1	0	0	0	0	1	0
16	Are any row crops (corn, milo, soybean) present?	Yes	0	0	0	0	0	1	0
17	Are water quality protection plans in use for each cropland?	No	0	0	0	0	0	1	1

No.	Question	Response	A	B	B1	B2	C	C*	D
18	Are any orchards present?	No	0	0	0	0	0	0	0
19	Are water quality protection plans in use for each orchard?	Yes	0	0	0	0	0	0	0
20	Is the intake a river intake?	Yes	1	1	0	1	1	1	1
21	Is the intake at a city-owned lake?	No	1	1	1	1	1	1	1
22	Is there water quality monitoring conducted at the river or lake?	Yes	0	0	0	0	0	0	0
23	Is TMDL needed for any of the rivers or lakes?	No	0	0	0	0	0	0	0
24	Are TMDL pollutants of concern reported by monitoring?	No	1	1	1	1	1	1	1
25	Are any point source discharges within 16 miles upstream of intake?	No	0	0	0	0	0	0	0
26	Is pretreatment required at any of the point sources?	No	0	0	0	0	0	0	0
27	Are all riparian buffers vegetated?	Yes	0	0	0	0	0	0	0
28	Are vegetated riparian buffer and a water quality protection plans in place?	No	1	1	1	1	0	1	0
29	Is there urbanized land within riparian buffer?	No	0	0	0	0	0	0	0
30	Is a NPDES stormwater permit required for the urbanized areas?	No	1	1	1	1	1	1	1
31	Are voluntary water quality protection plans in place for each urbanized area?	Yes	0	0	0	0	0	0	0
32	Is there industrial land use within riparian buffer?	No	0	0	0	0	0	0	0
33	Is NPDES stormwater permit required for industrial areas?	No	1	1	1	1	1	1	1
34	Are voluntary water quality protection plans in place for each industrial area?	Yes	0	0	0	0	0	0	0
35	Are there livestock present?	Yes	1	0	1	0	0	1	0
36	Is there livestock confinement present?	No	0	0	0	0	0	0	0
37	Is each confined livestock facility registered with KDHE?	Yes	0	0	0	0	0	0	0
38	Are any row crops (corn, milo, soybeans) present?	Yes	0	0	1	1	0	1	0
39	Are water quality protection plans in use for each row crop production?	No	0	0	1	1	0	1	0
40	Are any orchards present?	No	0	0	0	0	0	0	0
41	Are water quality protection plans in use for each orchard?	Yes	0	0	0	0	0	0	0
42	Is there any small grain (wheat, oats, barley) production?	Yes	0	0	1	1	0	1	0
43	Are water quality protection plans in use for each small grain production?	No	0	0	1	1	0	1	0
44	Are there unsewered developments (concentrations of lagoons or septic systems) present in Zone B?	No	0	0	0	0	0	0	0
45	Is a general watershed water quality protection plan in use?	No	1	1	1	1	1	1	1
46	Are any point source discharges within 16 miles upstream of intake?	No	1	1	1	0	1	0	1
47	Is pretreatment required at any of the point sources?	No	0	0	0	0	0	0	0

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Site Comments:

The Site Comments section lists all the comments that were added for the potential sources of contamination found in the assessment area.

Local comments and feedback from people that are familiar with the assessment area is an important aspect of the assessment. The comments greatly improve the assessment by adding detail to the sites that can be referenced for more information.

This local information may include comments on potential contamination threats (or lack there of), local water quality protection initiatives, etc. Adding comments are optional and are mainly focused on sources in areas that could have the greatest impact on water supply if a spill or release occurred in the environment. It is left to the discretion of the PWS and/or source water assessment committee to add comments.

Site Comments

Public Water Supply: **KANSAS ARMY AMMUNITION PLANT**

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Comments for Unregulated Sites

Potential Contaminant Site No.	Site Comments	Author
158992	Blue square is car wash located at 4th and Kennedy Street, Burlington, KS.	Marilyn Eccles

Comments for Regulated Confined Animal Feeding Operations Sites

Did Not Receive Any Comments

Comments for Regulated Hazardous Waste Sites

Did Not Receive Any Comments

Comments for Regulated Leaking Storage Tank Sites

Did Not Receive Any Comments

Comments for Regulated Identified Contaminated Sites

Did Not Receive Any Comments

Comments for Regulated Solid Waste Sites

Did Not Receive Any Comments

Comments for Regulated Waste Water Sites

Did Not Receive Any Comments

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Added Site Comments:

The Added Site Comments section lists the comments for why sites were added as a potential source of contamination found to the assessment area.

Added Site Comments

Public Water Supply: **KANSAS ARMY AMMUNITION PLANT**

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Comments for Added Contaminant Sites

Added Contaminant Site Name	Site No.	Site Comments	Author
Car Wash	9000676	Car wash	Marilyn Eccles
Car Wash	9000691	Car Wash	Marilyn Eccles
Coffey County HHW Center	9000679	HHW	Marilyn Eccles
Coffey County Recycling Center	9000680	Recycling Center	Marilyn Eccles
Coffey County Subtitle D Landfill	9000678	Landfill	Marilyn Eccles
Convenience Store	9000675	Gas Station	Marilyn Eccles
Convenience Store	9000682	Gas Station	Marilyn Eccles
Gas station	9000677	Gas Station	Marilyn Eccles
Oil Station	9000673	Gasoline Service Station	Marilyn Eccles
Oil Station	9000673	Gasoline Service Station	Marilyn Eccles
Oil Station	9000673	Please note that 75 Hwy is 4th Street and map is not accurate. The Amoco gas station is located to the east of Hwy 75/ 4th Street. The location of the red dot indicates the gas station which is based on the GIS map.	Marilyn Eccles

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Analysis Question Comments:

The Analysis Question Comments section lists all the comments that were added during analysis portion of the assessment, in which a series of yes/no questions were asked.

Evaluators have the option to add comments to questions to clarify why a response was given or to give more details to a question. Local comments and feedback from people that are familiar with the assessment area is an important aspect of the assessment. The comments greatly improve the assessment by adding clarification and details that could not be identified with a simple yes or no response.

Analysis Question Comments

Public Water Supply: **KANSAS ARMY AMMUNITION PLANT**
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Comments for Analysis Questions

Analysis Question	Question Comments	Author
Has riparian area been farmed up to the stream/riverbank?	Unknown	Dean Cramer
Has riparian area been farmed up to the stream/riverbank?	Unknown	Dean Cramer
Has riparian area been farmed up to the stream/riverbank?	Unknown	Dean Cramer
Is the intake located at a treatment plant?	Unknown	Dean Cramer
Has riparian area been farmed up to the stream/riverbank?	Unknown	Dean Cramer
Has riparian area been farmed up to the stream/riverbank?	Unknown	Dean Cramer
Has riparian area been farmed up to the stream/riverbank?	Unknown	Dean Cramer
Has riparian area been farmed up to the stream/riverbank?	Unknown	Dean Cramer
Is each confinement area registered with KDHE?	uNKNOWN	Dean Cramer
Is each confinement area registered with KDHE?	Unknown	Dean Cramer

Comments for Analysis Questions

Analysis Question	Question Comments	Author
Is each confinement area registered with KDHE?	Unknown	Dean Cramer
Is each confinement area registered with KDHE?	Unknown	Dean Cramer
Is each confinement area registered with KDHE?	unknown	Dean Cramer
Is each confinement area registered with KDHE?	Unknown	Dean Cramer
Is each confinement area registered with KDHE?	Unknown	Dean Cramer
Is the intake located at a treatment plant?	Unknown	Dean Cramer
Is each confinement area registered with KDHE?	Unknown	Dean Cramer
Is each confinement area registered with KDHE?	Unknown	Dean Cramer